



State of New Hampshire
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095
(603) 271-3406 FAX (603) 271-7894



June 14, 2002
Letter of Deficiency
DAM #232.07

Mr. Lee Dunham
Town of Swanzey
P.O. Box 9
East Swanzey, NH 03446-0009

RE: Swanzey Lake Dam, Swanzey

Dear Mr. Dunham:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that plays a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on July 17, 2002. During this visual inspection and/or file review, the following deficiencies were observed:

- There were sinkholes along the right masonry abutment wall, along the downstream face;
2. There was active seepage along the toe of the right spillway with deposits of clay material collecting in the spillway. Clay had been laid along the upstream face of the right abutment in an effort to eliminate seepage in this area;
 3. There were depressions along the upstream face of the right embankment where clay had been installed. Seepage may be migrating around the right cutoff wall;
 4. There are no stoplog locking devices on either stoplog bay. In order to lessen effects of shoreline erosion from wave action during the full pond months, maintaining a lower permanent pool elevation by removing at least one board from each bay and installing a locking device will help prevent further shoreline damage;
 5. The right embankment was poorly vegetated;
 6. The dam cannot pass the design storm event without operations with one foot of freeboard; and
 7. There is no operation and maintenance plan on file for the dam.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

November 15, 2002:

1. Repair the sinkholes along the right masonry abutment wall, along the downstream face;

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2. Repair the depressions along the upstream face of the right embankment where clay had been installed;
3. Consider removing one stoplog from each bay to provide additional storage and discharge capacity and install stoplog-locking devices on both stoplog bays. Consult with DES for design guidance;
4. Revegetate the right embankment that is poorly vegetated;
5. Prepare and submit to the DES a written O&M plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel. Refer to the enclosed guidelines;
6. Investigate the condition of the right earthen embankment and masonry abutment wall where sinkholes and seepage has been noted in the past. Develop and submit to DES a plan to address this reoccurring deficiency; and
7. Consider installing a defined and armored emergency spillway around the right end of the dam to improve the discharge capacity and provide a greater factor of safety against overtopping.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

COPY
Grace E. Levergood
Grace E. Levergood, P.E.
Dam Safety Engineer

Attachments Guideline for an O&M plan, DB13

cc: Gretchen Rule

Certified # 7099 3400 0002 9773 8501

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